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Content Analysis of Competences and Scientific Approach in English Textbook

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Abstract

Textbook is one of teaching sources which serves the material based on the curriculum. In Indonesia, English textbook is provided by the government in order to facilitate the implementation of 2013 Curriculum. This book is expected to be a guideline in teaching and learning process. However, the conformity of the materials in this book to the competences and approach of 2013 Curriculum is questioned. Thus, analysis on the content of the textbook was conducted. This study analyzed English textbook for Tenth grade students published by Ministry of Education and Culture with the title 'Bahasa Inggris'. The aims of this study were to find out whether the book reflected the competences and approach of 2013 Curriculum and to describe the pattern attribution of competences and scientific approach in the textbook. The research method applied was qualitative content analysis study under the perspective of textbook evaluation. The data were collected through document analysis and interview. The result showed that the materials match each item of core and basic competences. The scientific approach stages were presented implicitly through the activities in the book. For the pattern attribution, attitude competence was incorporated in all activities through all scientific approach stages in this book. Knowledge competence was mostly found in Exploring and Observing stage. Meanwhile, skill competence was mostly found in Communicating stage.

Keywords: Competences; Content Analysis; Curriculum; Scientific Approach; Textbook

Introduction

In the school year of 2014-2015, Indonesia has implemented 2013 Curriculum in all schools. The evaluation shows that many schools are not ready yet and have problems in the implementation. Based on this evaluation, the government made the decision to delay the implementation of the 2013 Curriculum at some schools. However, this curriculum cannot be terminated or replaced with other curriculum because it has a strong legal foundation. Thus, the government decided to keep the 2013 Curriculum exists in some schools that have been running the 2013 Curriculum for the past three semesters.

The pros and cons on the implementation of the 2013 Curriculum are caused by the differences in points of view towards the whole concept of its based curriculum. Some teachers appraise that the 2013 Curriculum do not only makes the students more active, critical, and creative (Ferdiansyah., 2013; Martini in Harahap., 2014), but also shapes the better character because the spiritual aspects and social attitude of

the students are being assessed. By the implementation of the 2013 Curriculum, teachers can breakdown and guide learners to see their ability. However, others judge that the 2013 Curriculum is ineffective because the learning model applied in scientific approach is not understood by teacher very much. Thus, learning activities undertaken by teachers in the implementation of the 2013 Curriculum are not in accordance with the construction. It happened because in the training-of-trainers session, the trainers did touch upon scientific approach but at the very general level and the illustrations given were mainly those related to the teaching of science (Agustien., 2014, p. 57).

Another thing that is still bothering some teachers related to the implementation of the 2013 Curriculum is a matter of textbook, especially English textbook. For the 2013 Curriculum, the Ministry of Education and Culture has provided English textbook. There is a significant difference between the previous English textbook of the 2006 Curriculum and the English textbook of the 2013 Curriculum. In the 2006 Curriculum, English textbook concerns on the language skills as the point to deliver the competences in English such as listening, speaking, reading, and writing. It is completely different from the 2013 Curriculum which uses integrated skills concept (Nahrowi., 2013). The English textbook of the 2013 Curriculum is no longer divided based on the skill competence, but based on the types of texts or genres. Hence, integrated thematic student book which emphasizes on the sustainability of attitude, knowledge, and skills has been designed.

Some researches had been conducted to evaluate the English textbook of the 2013 Curriculum since textbook is an important part of the teaching and learning process. The result shows that the 2013 Curriculum English textbook for Junior High School has good conformity to the basic competence of the 2013 Curriculum (Reswari., 2014). According to Anindyakirana (2014), the book also reflects the aims and objectives of the 2013 Curriculum. However, Reswari (2014) found that the book does not reflect the graduate competences. The materials for attitude domain are very limited (Reswari., 2014). In the teaching and learning process method, the scientific approach elements can be readily seen in the pages of the textbooks, but the instructions are unclear (Agustien., 2014; Khumairoh., 2014; Reswari., 2014).

Most of researchers done in analyzing the content of the 2013 Curriculum English textbook are concerned in the level Junior High School. As a result, in the 2014 the government has released the second edition of students and teacher English textbook for Junior High School as revised edition (Tohir., 2014). Meanwhile, there is no revised edition for students and teacher English textbook for Senior High School. This first edition of English textbook is still used in all schools as a main guideline in language teaching. It can be inferred that there is a gap in content analysis study to know the quality of the 2013 Curriculum English textbook for level of Senior High School. Recognizing this gap and urgency, the researcher conducts content analysis study under the perspective of textbook evaluation to find out whether the book for Senior High students reflects the competences and approach of 2013 English Curriculum and to describe the pattern attribution of competences and scientific approach in the textbook.

Review of Literature

The Underlying Theory of the 2013 Curriculum

The development of the 2013 curriculum is in line with the Trilling & Fadel (2009) theory related to the 21st Century learning. They stated that the society's educational goals throughout the ages are to contribute to work and society, exercise and develop personal talents, fulfill civic responsibilities, and carry traditions and values forward. In order to achieve these goals, innovation and creativity are needed. To overcome those problems, Trilling & Fadel (2009) suggested learning framework to teach the traditional core subject areas at first, then come the 21st century subject themes, such as financial, health, and environmental literacy, then three sets of skills that most needed in the 21st century. Those three skills are learning and innovation skills, digital literacy skills, as well as career and life skills (Trilling &

Fadel (2009., p.48). The focus of the first skill consists of critical thinking and problem solving, communication and collaboration, creativity and innovation. The second skill includes information literacy, media literacy, information and communication technology (ICT) literacy. Career and life skills include flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, as well as leadership and responsibility.

Trilling & Fadel (2009, p. 89-90) stated that the important tools to support a 21st century approach in learning and teaching are not only the internet, pen and paper, cell phones, educational games, tests and quizzes, a good teacher, educational funding, loving parents, but also questions (and the process to uncover their answers), and problems (and the inventing of their possible solutions). In order the learning to be effective, they proposed learning activities that build 21st century skills and deepen understanding of the learning content. The project design activities are students' planning their work, doing research, sharing findings with other team members, asking questions, designing procedures, taking on leadership and group facilitation roles, analyzing their own results, getting feedback from others, and so on (p. 98).

The Competences of the 2013 Curriculum

The graduate competence standard of the 2013 Curriculum refers to the concept of intercultural competence. The goals of learning are to develop the students' competences namely attitudes, knowledge, and skills that are elaborated in each education unit. The study that was conducted by Deardorff (2009) resulted Intercultural Competence Framework which consists of attitudes, knowledge, and skills. She stated that attitude is the foundation of the development of knowledge and skills. Several essential attitudes are respect (valuing other cultures, cultural diversity), openness (to intercultural learning and to people from other cultures, withholding judgment), curiosity and discovery (tolerating ambiguity and uncertainty). Based on her study, knowledge includes cultural self-awareness (meaning the ways in which one's culture has influenced one's identity and worldview), culture-specific knowledge, deep cultural knowledge including understanding other world views, and sociolinguistic awareness. Meanwhile, she stated that skill is processing of knowledge which consists of observation, listening, evaluating, analyzing, interpreting, and relating. The process model of intercultural competence that suggested by Deardorff (2009) begins with individual level (attitudes), then move to interpersonal/interactive level (outcomes). There are internal and external outcome for the enactment of intercultural competence model. The desired internal outcome consists of Adaptability (to different communication styles and behaviors; adjustment to new cultural environments), Flexibility (selecting and using appropriate communication styles and behaviors; cognitive flexibility), Ethnorelative view, and Empathy (Deardorff., 2009). The desired external outcome is behaving and communicating effectively and appropriately (based on one's intercultural knowledge, skills, and attitudes) to achieve one's goals to some degree (Deardorff., 2009).

Intercultural competence is about relationships with each other, survival as humankind, and work together to address the global challenges in this century (Deardorff., 2009). She stated that it is a lifelong process on how one acquires the necessary knowledge, skills, and attitudes which must be intentionally addressed. It can be included in a more comprehensive, integrated approach through curricular and co-curricular efforts (Deardorff., 2009). In order to improve the development of intercultural competence among students and also to provide meaningful feedback to students themselves, critical reflection is needed (Deardorff., 2009).

Scientific Approach

Scientific approach is an approach of teaching which is designed with the same rigor as science at its best (Fauziati., 2014). Learners make observations, develop hypotheses about phenomena, devise text to investigate their hypothesis, and communicate their finding to others. This approach improves oral communication and critical thinking of the learners, encourages their curiosity toward the world around them, and exhibits more positive attitudes toward science.

The adaptation of scientific approach is intended to create innovative and creative person for the future. The stages are based on Dyer, et. al. (2009) study on how origins new ideas happens from successful person in this era. They identified five discovery skills, namely associating, questioning, observing, experimenting, and networking. Those skills are explained as follows.

Associating is the ability to connect unrelated questions, problems, or ideas from different fields in order to generate the ideas. This skill is the central of innovative person. It associates things based on any number of experiences and knowledge from our lives to produce novel ideas. Innovative person is accustomed to understand, categorize, and store new knowledge in order to build this skill.

Questioning is the ability to brainstorm and ask questions that challenge common wisdom to get inspiration. The effective questions are 'why', 'why not', and 'what if'. For example, 'If we did this, what would happen?'. Creative person remembers their questions when had a new venture. When asking, it is important to think the opposite of the idea and out of the box insigh

Observing is examining the phenomena by seeing and asking why it happens. They observe into small details in order to gain insights about new ways of doing things. To sharpen this skill, observation should be conducted as neutrally as possible and avoid to make judgements about what is being observed.

Experimenting is the ability to try out new ideas to see the response emerged. The experiences are constructed from observation (such as read books) to take a part a product or process. In order to strengthen experimentation, hypotheses-testing mind-set is needed. New hypotheses are developed, then test them to search new products and processes.

Networking ('communicating' in the 2013 Curriculum) is aimed to extend the knowledge. After finding and testing ideas, meet and talk to people with different perspectives and idea in other fields from all over the world is needed to solve problems and achieve success. To improve networking skills, it is suggested to search for creative people and share what they do to stimulate creative thinking.

In English teaching process of the 2013 Curriculum, the scientific approach is used through some steps of the process; they are observing, questioning, experimenting, associating, and communicating. Here are the explanations of each step as stated by Fauziati (2014):

a) Observing: This includes activities such as reading, listening, scrutinizing, and watching (with or without a device).

b) Questioning: This covers raising questions about the information the students do not understand from what is observed.

c) Experimenting: This includes doing experiments, reading references other than textbooks, observing objects or events, or conducting interviews with resource persons.

d) Associating: This covers processing information already gathered from the previous steps or activities such as gathering information and data observation.

e) Communicating: This covers some activities such as delivering the observations, presenting the conclusions in verbal or in written form, or through other media.

Methodology

Research Design

This study was a qualitative content analysis study. It is a research method for the subjective interpretation of the content of text through the systematic classification process of coding and identifying themes or patterns (Hsieh & Shannon., 2005., p. 1278). In order to know the conformity of the materials with the curriculum and approach, this content analysis study was conducted under the perspective of textbook evaluation. Textbook evaluation is the systematic judgment of the materials in relation to the aims of the materials and the learners who were using them (Tomlinson., 1998).

Sample of the Study

The sample of this study was taken by purposive sampling. The sample of this study was English textbook entitled "Bahasa Inggris" for the first semester of tenth graders which was developed by the Indonesian Ministry of Education and Culture in 2013. This textbook was chosen because it was used in the 2013 Curriculum, and it was already distributed to the schools that were applying the 2013 Curriculum. The textbook consisted of 116 pages which were divided into 9 chapters.

Sources of Data

The sources of data in this study were documents and informants. The documents which were used as the sources in this study were checklist instrument and English textbook. The informants of this study were two teachers from one of private schools who implemented the 2013 Curriculum in English language lesson and used the textbook being studied. Besides, the researcher also took four students from those school. Two of them were categorized as students who had high ability in English subject and the rest were students who had low ability in English subject.

Data Collection Techniques

The data were collected through document analysis and interview. In document analysis, the data were presented in checklist and field-note. The checklist consisted of the criteria of textbook evaluation on core competence, basic competence, and scientific approach stages based on the 2013 Curriculum. The field note was in the form of table which contained the analyzed data and also the evidence in the textbook content. For the interview, semi-structured interview was applied to get the teachers' and students' opinion toward the textbook. According to Cohen, et al. (2005), semi-structured interview enables the interviewer to ask respondent to extend, elaborate, add to, provide detail for, and clarify or quality their responds. It allowed the interviewer to get deep information and clear up any misunderstanding.

Data Validity

In order to verify the result, triangulation of sources of data and methods was used. In the triangulation of sources of data, the researcher interviewed different sources of information in order to increase the validity of the study. Triangulation of methods was done by checking the data from the same informant using different methods. The researcher gave the document analysis and interview to the same teachers. The researcher discussed the different result to the source of data to confirm which data were correct.

Data Analysis Technique

The data were analyzed using James Spradley data analysis technique. Spradley (1979) described a four-stage process of data analysis: domain analysis, taxonomic analysis, componential analysis, and theme analysis. Domain analysis is "search for the larger units of cultural knowledge" (Spradley., 1979: 94). This first stage involved identifying the semantic relationships salient to the participants talk and activities. It was performed upon the criteria of textbook evaluation and interview transcripts that researcher conducted with each of the informants. In taxonomic analysis, researcher decided how many domains the data analysis encompassed. This afforded researchers a more in-depth examination of the domains. Taxonomic analysis is selecting key domains and constructing taxonomies or systems of classification (Spradley., 1979). The third analysis is componential analysis which is comparing and contrasting terms in a domain (Spradley., 1979). In componential analysis, multiple relationships among terms in the domain were examined. The processes were searching for contrasts, sorting them out, grouping some together as dimensional, and entering all this information onto a paradigm. Finally, in theme analysis, cultural themes are uncovered (Spradley., 1979). It was a search for the relationships among domains and how they were linked to the culture as a whole. The finding of cultural value was the outcome.

Result and Discussion

Core and Basic Competences of the 2013 Curriculum

Core competences consist of **s**piritual attitude, social attitude, knowledge, and skill. The spiritual attitude is covered in the first core competence. The social attitude is covered in the second core competence. The knowledge is formulated in the third core competence. The skill is stated in the fourth core competence. In order to check the suitability of basic competences to the materials in the student book, each chapter is analyzed.

Table 1 shows that Core Competences are elaborated into the Basic Competences. It shows that the core and basic competences of the tenth graders in English subject are well covered in the "Bahasa Inggris" English textbook. Similar to researcher, the two evaluators also found that attitude, knowledge, and skills already exist in every chapter in this book. Besides, they also agree that all Basic Competences are well covered in the textbook.

a. Spiritual Attitude Competence

The spiritual attitude aspects that the tenth graders need to learn are adhering and practicing the respective religious teaching. It is achieved when students are grateful for the opportunity of learning English as an international language of communication and eager to learn every topic in the book. It can be assessed in Reflection activity in the end of the chapter. The questions in this activity will lead them to

know how serious their learning process is. The result of reflection shows whether the students understand the material well or not. Besides, this competence also appears in the points to ponder section in chapter 2, 5, 6, and 7. In this section, students think deeply beyond the problem and their answers are influenced by their religious teaching and background of knowledge.

Table 1 Conformity of core and basic competences to the material

Core Competences	Basic Competences	Chapters								
		1	2	3	4	5	6	7	8	9
1. Spiritual	1.1	√	√	√	√	√	√	√	√	√
2. Social	2.1	√	√	√	√	√	√	√	√	√
	2.2	√	√	√	√	√	√	√	√	√
	2.3	√	√	√	√	√	√	√	√	√
3. Knowledge	3.1	√								
	3.2		√							
	3.3		√							
	3.4			√						
	3.5				√					
	3.7					√	√	√	√	
	3.8									√
4. Skill	4.1	√								
	4.2	√								
	4.3		√							
	4.4		√							
	4.5			√						
	4.6				√					
	4.8					√	√	√	√	
	4.9						√	√	√	
	4.10					√	√		√	
	4.11									√
	4.12									√

b. Social Attitude Competence

The social attitude aspects that the tenth graders need to learn are: adhering and practicing the honesty, discipline, responsibility, solidarity (team work, cooperation, tolerance, peace), politeness, responsive, pro-active, and effectively taking a part to solve various problems in interacting with the social and natural environments, as well as in placing themselves as a reflection of the nation in the association world. Discipline, teamwork, and proactive are achieved through the group activity in each chapter. Care and tolerance are obtained through the dialog in the book. Honesty and responsibility are acquired in the reflection in each chapter and in individual task. Politeness and responsiveness are gained through the student-teacher and student-student activity. Interacting with the social and natural environment is attached in points to ponder section in which the students think about their environment.

c. Knowledge Competence

The knowledge aspects that the students need to learn are understanding, applying, analyzing factual, conceptual, procedural knowledge based on the curiosity on science, technology, art, culture, and humanities with human insight, national, state, and civilization-related causes of phenomena and events, as well as applying procedural knowledge in the specific studies according to the talents and interests to solve the problem. Some examples for knowledge competence discovered in the book are: the use of be and have in the self identity texts; the social functions of complimenting expressions; the expressions of extended congratulations and its responses; text structure of simple descriptive text and announcement text.

d. Skill Competence

The competences that the students need to learn on skills are having ability of effective thinking and action, and being creative in both abstract and concrete domains as a development of what is learnt at school independently. This competence can be found in Speaking and Writing activities. It is also found in Reflection and Further Activity because these two activities combine speaking and writing aspects. Some examples for skill competence in the book are: developing oral text to describe, ask, and respond to self-identity; developing written texts to express and respond to the expressions of showing care; grasping the meaning of oral descriptive texts about people; editing simple written descriptive text about tourist destination; and developing simple spoken descriptive texts about famous historic buildings by given guidance questions.

Scientific Approach

The names of activities in the book are not initialed by scientific approach stages such as Observing, Questioning, Exploring, Associating, and Communicating. The activities in the book are initialed by Warmer, Vocabulary Building, Pronunciation Practice, Dialogue, Reading, Vocabulary Exercise, Text Structure, Grammar Review, Speaking, Writing, Reflection, and Further Activity. These names of activities are the same as those in previous textbooks curriculum. The differences are in the additional activities namely Reflection and Further Activity.

In order to know the existence of scientific approach in this book, the researcher analyzes the instructions of activities that may represent the elements or stages of scientific approach. The stages are Observing, Questioning, Exploring, Associating, and Communicating. The findings show that the textbook accommodates the scientific approach stages in every chapter, except chapter 4. Questioning stage does not exist in chapter 4, because there is no discussion activity in that chapter. Most of the activities in chapter 4 are doing task individually. Even in speaking activity, although the students are engaged in pairs, they just do the conversation directly based on the situation given.

Besides, the book does not accommodate Scientific Approach elements clearly because most of the steps of scientific approach are not presented in order. Evaluator 1 said that scientific approach is not well covered because this book does not mention the stages of scientific approach. He should modify some activities that can be used as the steps of scientific approach, because the book does not mention it clearly which one Observing, Questioning, Exploring, Associating, and Communicating is. Evaluator 2 thought that the scientific approach in each unit of this book has already been covered and existed. The steps of scientific approach can be found implicitly in the activities. The steps in this book are not presented in order, so the activities that match the step should be considered. Based on the students' point of view, the steps of scientific approach in this book are not completely presented. Only for the steps

Observing and Communicating, the students agree that this book makes them observe something in the beginning of a topic and makes them practice their communication skill in every chapter.

Based on the explanation above, it is revealed that the scientific approach is displayed implicitly. It proves contradictory to Richards' (2001) theory that textbook can be a medium of initial teacher training or a limited teaching experience teacher. For teachers, the use of scientific approach in teaching language is a new experience. However, this book cannot be used as guidance in implementing scientific approach in the classroom. The step of activities cannot be delivered as it is written in the book. The teacher should determine whether an activity is classified as Observing, Questioning, Experimenting, Associating, or Communicating. This table shows the activities in the book that reflect each stage of scientific approach. These activities are supported by Fauziati (2014) theory about stages of scientific approach.

Table 2 Implicit form of scientific approach stages in textbook

Scientific Approach Stages	Implicit form in the Book
Observing	Observing picture or text in every beginning of activity
Questioning	Group/ class discussion after observing
Exploring	Reading references, completing exercises, conducting interviews
Associating	Processing and analyzing the step before, connecting the material with other sources
Communicating	Delivering discussion result, doing presentation, reporting the interview

Pattern Attribution of Competences and Scientific Approach in the Textbook

a. Spiritual Attitude Competence

This competence is delivered indirectly in all activities through all stages of scientific approach in this book. In order for students to have spirit of learning as stated in basic competence, the teacher should encourage and motivate students to do the activities in textbook. By doing so, it is expected that the students show their seriousness in learning English. Besides, the teacher should develop students' willingness to communicate using English to teacher and friends when observing, questioning, Exploring, associating, and communicating. Thus, the textbook does not provide any information on what page and how spiritual competence can be achieved. It is supported by Machali (2014, p. 38) that spiritual competence is developed in every activity with indirect teaching in learning process. Other than that, the acquisition of this competence can be seen from students' comprehension and progress in every chapter. It can be monitored at the end of the chapters in Reflection activity that embraces all scientific approach stages. The students should answer the questions honestly in Reflection activity. Their honesty is a form of accountability to God. It is supported by Degil and Regnier (2014) that from the religious point of view, the spirituality is determined by the personal relations with God.

The practice of this competence in learning process is that the students have great passion in Observing, Questioning, Exploring, Associating, and Communicating in every learning activitiy. Thus, it is expected that students can produce good result in every activity in this book, because they do the scientific approach stages sincerely. It is supported by Deardorff (2009) that attitude is the foundation of the development of knowledge and skills. It is also supported by Degil and Regnier (2014, p. 195) that the

introduction of spiritual and religious components into educational process encourages spiritual autonomous development of students, their creativity, and self-development, and self-improvement.

b. Social Attitude Competence

This competence is incorporated in all activities through all stages of scientific approach in this book because it cannot be taught in isolation. It is supported by students' opinion towards the attitude they get while using this book. Student 2 becomes more polite to people. It can be caused by the habituation of Observing and Associating. These kinds of stages are usually done together with group or classmates. Student 4 becomes confident because he is brave to speak in front of the class. It is caused by the habituation of Communicating stage. Besides, this social attitude can be obtained from the topic being studied in this book. Student 1 learns how to be a sympathetic person, and student 3 cares about a friend who is sick. Therefore, this competence implicitly exists in the book and it needs the teachers' role to emerge students' attitude in the learning process. It is supported by Machali (2014, p. 33) that learning the attitude competence is not taught verbally, but through examples and role models of teachers.

In Observing stage, the students show politeness and solidarity to the teacher and friends. It can be obtained when students observe the activities such as in warmer, dialog, and reading. It is supported by the Evaluator 2 who stated that observing can be done in Warmer activities. In Questioning stage, the students show their confidence and responsibility while raising questions about the topic being discussed. In Exploring stage, the social attitude that can be achieved are discipline and pro-activeness. This includes doing experiments, reading references other than textbooks, or conducting interviews with resource persons. In Associating stage, students become responsible when processing information already gathered from the previous steps or activities such as gathering information and data observation. In Communicating stage, the social attitudes that can be achieved are confidence and respect to some activities such as delivering the observations, presenting the conclusions in verbal or in written form, or through other media. These relationships is supported by Deardorff (2009) that intercultural competence is about relationships with each other, survival as humankind, and work together to address the global challenges.

c. Knowledge Competence

Basically, language components such as vocabulary, pronunciation, grammar, and other dimensions are included into knowledge competence. However, in this book, Reading section is also included into this competence. It is obtained from the distribution of basic competences in this study. The finding shows the pages in each chapter containing the materials or tasks that fulfill the core competences number 3. Based on the findings, the knowledge competence is found in Warmer, Vocabulary Building, Pronunciation, Dialog, Reading, Vocabulary Exercises, Text Structure, and Grammar activities. The attribution of knowledge competence and scientific approach in this book is presented in Table 3.

Based on Table 3, the activities in knowledge competence mostly deal with Observing and Exploring stage. The interpretation of scientific approach in each section not only covers one step of scientific approach. For example, when students learn in Grammar section, they may have various steps of scientific approach to be done such as Observing, Questioning, Exploring, Associating, and Communicating. It is supported by Agustien (2014, p. 52) that "in the Scientific Approach, the learners are expected to undergo all of the scientific approach steps from observing to communicating". It can be inferred that for this competence, this book has many activities that can be used as one of resources for learning English based on scientific approach. Besides, this book can be used for students to be a

reference in gathering the information of English knowledge. It is supported by Cunningsworth (1995) that textbook consists of a source of ideas and activities and a reference source for students.

Table 3 Pattern attribution of knowledge competences and scientific approach in the Textbook

Comp.	Act.	SAS	Chapter								
			1	2	3	4	5	6	7	8	9
C3	A.	O	√	√	√	√	√	√	√		√
		Q		√	√		√	√			
		E	√	√	√						
		A		√							
		C	√	√		√				√	
	B.	O			√						
		Q									
		E	√	√	√	√	√	√	√	√	√
		A					√				
		C									
	C.	O	√	√		√	√	√	√	√	√
		Q									
		E									
		A									
		C									
	D.	O		√	√						
		Q			√						
		E		√							
		A									
		C		√	√						
	E.	O	√			√	√	√	√	√	√
		Q	√							√	√
		E	√					√		√	√
		A	√			√		√		√	√
		C	√			√	√	√	√	√	√
	F.	O									
		Q									
		E					√				
		A	√			√		√	√	√	√
		C			√	√	√				
	G.	O					√				
		Q					√			√	√
		E					√			√	√
		A	√				√			√	√
		C	√				√			√	√
	H.	O	√		√		√	√	√	√	√
		Q	√					√			
		E	√					√		√	
		A	√		√		√	√	√	√	√
		C					√	√			

(A= Warmer; B= Vocabulary Building; C= Pronunciation; D= Dialog; E= Reading; F= Vocabulary Exercises; G= Text Structure; H= Grammar; O= Observing; Q= Questioning; E= Exploring; A= Associating; C= Communicating)

The social function, text structure, and linguistics features of texts can be found easily through some activities. Different from it, there is no page that clearly presents the social function, text structure, and linguistics features of some expressions in the textbook. Meanwhile, in some basic competences, it is stated that the learners should understand the social function, text structure, and linguistics features of some expressions and not a text. It contradicts Eggins (2004) that genres features such as communicative purpose, text structure, and linguistic features are given to text types, not speech function.

d. Skill Competence

Skill competence is found in Speaking, Writing, Further Activity, and Reflection. In Speaking activity, the students are asked to do role play, tell, make, respond, act out, interview, and report orally. These activities are included in skill competences. Thus, the most existing stage of scientific approach in this section is Communicating stage. It is supported by Machali (2014, p. 41) that in this stage, the students are given opportunity to explain, display, dialogue, and conclude what is being obtained from the previous stages.

Table 4 Pattern attribution of skill competences and scientific approach in the Textbook

Comp.	Act.	SAS	Chapter								
			1	2	3	4	5	6	7	8	9
C4	I.	O	√							√	
		Q	√							√	
		E	√							√	
		A	√	√						√	
		C	√	√	√	√	√	√	√	√	√
	J.	O							√		
		Q							√		
		E							√		
		A							√		
		C	√	√	√	√	√	√	√	√	√
	K.	O	√	√	√	√	√	√	√	√	√
		Q	√	√	√	√	√	√	√	√	√
		E	√	√	√	√	√	√	√	√	√
		A	√	√	√	√	√	√	√	√	√
		C	√	√	√	√	√	√	√	√	√
	L.	O						√			
		Q						√			
		E						√			
		A						√			
		C			√			√			

(I= Speaking; J= Writing; K= Reflection; L= Further Activity; O= Observing; Q= Questioning; E= Exploring; A= Associating; C= Communicating)

In Writing activity, the students are asked to write, rewrite, edit, complete, and respond in written form. These activities are included in skill competences. Thus, the most existing stages of scientific approach in this section is Communicating stage. It is supported by Fauziati (2014, p. 157) that Communicating covers some activities such as delivering the observations and presenting the conclusions verbally or in written form.

Further Activities section only exists in 2 out of 9 chapters in this book. Further Activities make the learning more meaningful for the students. The activities in this section require the students to connect the knowledge they have learned in this English textbook to the other subjects such as Biology. It is a good implementation on how to make the learning integrated to one another. These kinds of activities give a chance for students to practice what they have got in their real life. It is supported by Fauziati (2014, p. 155) that scientific approach is intended to develop learning activities based on the necessity to link it to the environment.

In Reflection activities, the instructions are the same from chapter 1 to 9. The instruction is 'At the end of this chapter, ask yourself the following questions to know how effective your learning process is'. Then, it is followed by questions related to the theme in each chapter. Reflection activity in this book asks the students to recall what they have learned in a chapter. To be able answer the questions in Reflection activity, the students must have knowledge and skill competence regarding the chapter being discussed. If the students answer is 'no' to one of these questions, they are asked to see the teacher or classmates and discuss how to make them understand the knowledge and be able to do the skill competence related to the theme better. It is supported by Deardorff (2009) that critical relfection is needed to improve the development of intercultural competence among students and also to provide meaningful feedback to students themselves. It means that the students may read the chapter and do the activities again to understand the learning. They repeat the learning steps in a chapter to obtain the knowledge and skill about the theme. Thus, in Reflection activity, all stages exist.

Having a detail look on Table 3 and Table 4, it can be seen that the Communicating stage is the most dominant stage than others. It is in line with the target of communicative competence in learning English. However, the Communicating stage in this book focuses on speaking to respond exercises rather than to present result or conclusion of a real life problem. The next dominant stage is Observing stage. The activities on Observing stage in this book are presented very well. The observed objects are texts, pictures, and also sounds. Then, Exploring and Associating stages almost get the same portion. The lack of real life problem in this book does not make the students deepen various sources of materials. The activities of Associating stages in this book only cover categorization and classification. It contradicts Dyer, et. al. (2009) concept that the central stage to produce novel ideas is in Associating skill, and one should accustomed to understand, categorize, and store new knowledge in order to build this skill. As the result, in this book, there is no reasoning and comparing activity toward the result of data gathering on the previous stage. This is also caused due to the lack of stimulation on formulating question or problem related to the topic in the book. There is no space for students to create their own questions related to the topic. The Questioning activities in this stage only repeat the questions that have been provided in the book to be discussed. It contradicts Dyer, et. al. (2009) that Questioning is the ability to brainstorm and ask questions 'why', 'why not', and 'what if' to get inspiration. Thus, it also contradicts Trilling & Fadel (2009) that the important tools to support a 21st century approach in learning and teaching are questions (and the process to uncover their answers), and problems (and the inventing of their possible solutions).

Conclusion

Having analyzed the competences and scientific approach in English textbook 'Bahasa Inggris' for Tenth grade students, the researcher draws conclusion related to the research findings. Firstly, the English textbook for the first semester of Tenth graders published by Ministry of Education and Culture contains the core competences and basic competences of the 2013 Curriculum. The materials in the book match each item of core and basic competences of the English subject for the Tenth grade students proposed by the Minister of Education and Culture. The finding of the research implies that this book contains ideal materials for the tenth graders, because the content corresponds to the core and basic competences of tenth grade students. The teachers must incorporate the aspect of spiritual and social

attitude into the elements of knowledge and skills in order to achieve all competences in 2013 Curriculum. The second finding reveals that the book represents scientific approach implicitly. The teachers cannot teach the materials as it is not written explicitly in the book. Thus, the teacher should apply scientific approach while using this book for teaching by considering whether the activities in the book reflect Observing, Questioning, Exploring, Associating, or Communicating stages. Due to the implicit form of scientific approach stages in this book, teachers who lack of experience and knowledge about it may find difficulties in using this book. Other than that, the use of this book for teaching should be accompanied by knowledge on the scientific method. The teacher can determine the method and arrange the activities based on characteristics of competence. For the pattern attribution of competences and scientific approach stages, attitude competence is incorporated in all activities through all scientific approach stages in this book. Knowledge competence is mostly found in Exploring and Observing stage. Meanwhile, skill competence is mostly found in Communicating stage.

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